

AMENDMENTS TO THE CLAIMS

The below listing of claims replaces all prior versions of claims in the application.

1. (Currently Amended) An electronic digital pressure switch for detecting a gas pressure ~~and generating an output~~, comprising:

a housing ~~that has~~ having a ventilating portion allowing a gas to pass therethrough[[],];
and

a pressure sensor inside the housing to detect pressure of a gas supplied to the housing
and to generate an output representing the detected pressure,

wherein the output generated by the ~~digital pressure switch~~ pressure sensor is used to
control the gas pressure ~~detected by the digital pressure switch~~ of the gas supplied to the housing.

2. (Original) The electronic digital pressure switch according to claim 1, wherein the ventilating portion is provided at an upper position of the housing when detecting the pressure of a gas that is lighter than air, while the ventilating portion is provided at a lower position of the housing when detecting the pressure of a gas that is heavier than air.

3. (Previously Presented) The electronic digital pressure switch according to claim 1, wherein the ventilating portions are provided at both upper and lower positions of the housing.

4. (Original) An electronic digital pressure switch for detecting pressures and generating outputs, comprising:

a contact output that turns ON/OFF according to detected pressures and that allows ON and OFF values to be set;

a display means that digitally displays detected pressures and also digitally displays ON/OFF values of the contact output by switching an operation mode; and

an analog output that changes its output values according to detected pressures.

5. (Original) The electronic digital pressure switch according to claim 4, comprising a plurality of the contact outputs.

6. (Original) The electronic digital pressure switch according to claim 4 or claim 5, wherein delay time can be set for the contact output or the contact outputs.

7. (Original) An electronic digital pressure switch for detecting pressures and generating outputs, comprising:

a contact output that turns ON/OFF according to detected pressures and that allows ON and OFF values to be set;

a display means that digitally displays detected pressures and also digitally displays ON/OFF values of the contact output by switching an operation mode;

a terminal board for connecting an external wire to the contact output; and

an analog output that changes its output values according to detected pressures,
wherein the analog output is directly drawn out from a substrate.

8. (Previously Presented) The electronic digital pressure switch according to claim 7,
further comprising:

a plurality of the contact outputs,
wherein the terminal board has as many poles as the number of the contact outputs and
power sources.

9. (Previously Presented) An electronic digital pressure switch for detecting a gas
pressure and generating an output, comprising:

a housing that has a ventilating portion allowing a gas to pass therethrough,
wherein the ventilating portion is provided at an upper position of the housing when
detecting the pressure of a gas that is lighter than air, while the ventilating portion is provided at
a lower position of the housing when detecting the pressure of a gas that is heavier than air.

10. (New) The electronic digital pressure switch according to claim 9,
wherein the output generated by the digital pressure switch is used to control the gas
pressure detected by the digital pressure switch.